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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/767,034

01/28/2004

Kartik B. Ariyur

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EXAMINER

LE, JOHN H

ART UNIT

PAPER NUMBER

2863

MAIL DATE

DELIVERY MODE

05/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/767,034

Applicant(s)

ARIYUR ET AL.

Examiner

JOHN H. LE

Art Unit

2863

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3, 13, 16-23, 25, 30-38, 40-45 and 47 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2, 12, 14, 15, 24, 26-29, 39 and 46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3-11 and 13 is/are allowed.
- 6) ☒ Claim(s) 16-23, 25, 45 and 47 is/are rejected.
- 7) ☒ Claim(s) 30-38 and 40-42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. This office action is in response to applicant's amendment received on 04/25/2008.

Claims 3, 5, 8, 13, 16, 18, 21, 25, 30, 32, 35, and 40 have been amended.

Claims 1, 2, 12, 14, 15, 24, 26-29, and 39 have been cancelled.

Claims 41-45 and 47 have been added.

Claim Objections

3. Claims 30-38, 40-42, and 47 are objected to because of the following informalities:

Claims 30-38 and 40-42 are objected to because a program product cannot comprise structure (computer readable medium).

Although the claims are written as product claims and appear to purport to be structure. The program claims seem to evidence that the remaining claims although not specifically calling the recited combination a program, really are intended to read on one. The structure is the processor running specific parts of the program.

Claims 32 and 35 should rewrite the preamble as following: "A computer readable medium embodying a computer program product, said program product comprising".

Claim 47 should renumber is 46 or claim 46 should cancel.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 16-23, 25, 45, and 47 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 18, 21 and its dependents appear to be non statutory. It appears that they merely directed to a mathematical algorithm (MPEP 2106.02). Further, in order to be considered patent eligible under 35 USC 101, a claimed process must either result in a physical transformation or contain a sufficient tie to a machine, article of manufacture or a composition of matter. In re Comiskey, 84 USPQ2d 1670 (Fed. Cir. 2007). In this case, the claimed invention does not transform any subject matter and has no tie to any machine, article of manufacture or a composition of matter.

Allowable Subject Matter

6. Claims 3-11 and 13 are allowed.
7. Claims 30-38 and 40-42 would be allowable if rewritten or amended to overcome the claims objections, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 5, none of the prior art of record teaches or suggests wherein a trend change detection mechanism determines a first convex hull for a set of upper confidence bounds and a second convex hull for a set of lower confidence bounds; the trend change detection mechanism adapted to compare the first convex hull and the

second convex hull to determine a transition point in the data set; the trend change detection mechanism adapted to determine an estimated trend of the data set based on the transition point and the set of upper confidence bounds and the set of lower confidence bounds. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 8, none of the prior art of record teaches or suggests wherein the trending system further comprises an outlier elimination mechanism, the outlier elimination mechanism adapted to remove statistical outliers in the data set by generating a first prediction cone for data points in a left sample window, generating a second prediction cone for data points in a right sample window, and determining if data points in a test window reside in the first prediction cone and the second prediction cone. It is these limitations as they are claimed in the combination with other limitations of claim, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Response to Arguments

8. Applicant's arguments with respect to claims 16-23, 25, 45, and 47 have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN H. LE whose telephone number is (571)272-2275. The examiner can normally be reached on 9:00 - 5:30.

Art Unit: 2863

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on 571 272 2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John H Le/
Primary Examiner, Art Unit 2863
May 15, 2008